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Part 1  
The Relationship Between  
Patients' Perceptions of Nurse  
Caring Behaviors and Patient  
Satisfaction with Labor and Delivery  
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Running head: Nurse Caring Behaviors

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The Relationship Between Patients' Perceptions  
of Nurse Caring Behaviors and Patient  
Satisfaction with Labor and Delivery

Women's satisfaction with their childbirth experience is an important issue, especially during this time of hospital cost containment and consumerism. Obstetrics, once viewed as a "loss leader" by hospital administration, is now viewed as the "leader" in establishing patient loyalty to the hospital. It is now recognized that women are the decision-makers for the family in an estimated 70% of situations where a medical caretaker or facility needs to be chosen (Bajo & Phillips, 1986). All over the country hospitals are making improvements in obstetrical services in hopes of increasing their share of a very competitive market. By providing the best possible childbirth experience, hospitals are influencing women to recommend their institution to family and friends not only for obstetrics, but for all hospital services.

In this atmosphere, the analysis of childbirth



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satisfaction gains significance. In comparison with the broader scope of patient satisfaction, the area of childbirth satisfaction has neither been studied for very long, nor has it been studied in great detail.

The majority of childbirth satisfaction research to date has focused on describing the concept and critiquing methodology for its study. Lumley (1985) discussed how childbirth satisfaction should be measured, by whom, at what time, and in what location. Another study determined five dimensions to childbirth satisfaction: the delivery itself, medical care, nursing care, information received and participation in the decision-making process, and physical aspects of the labor and delivery rooms (Seguin, Therrien, Champagne, & Larouche, 1989). A large part of childbirth satisfaction research has been done by physicians who focused on satisfaction with medical care, in particular.

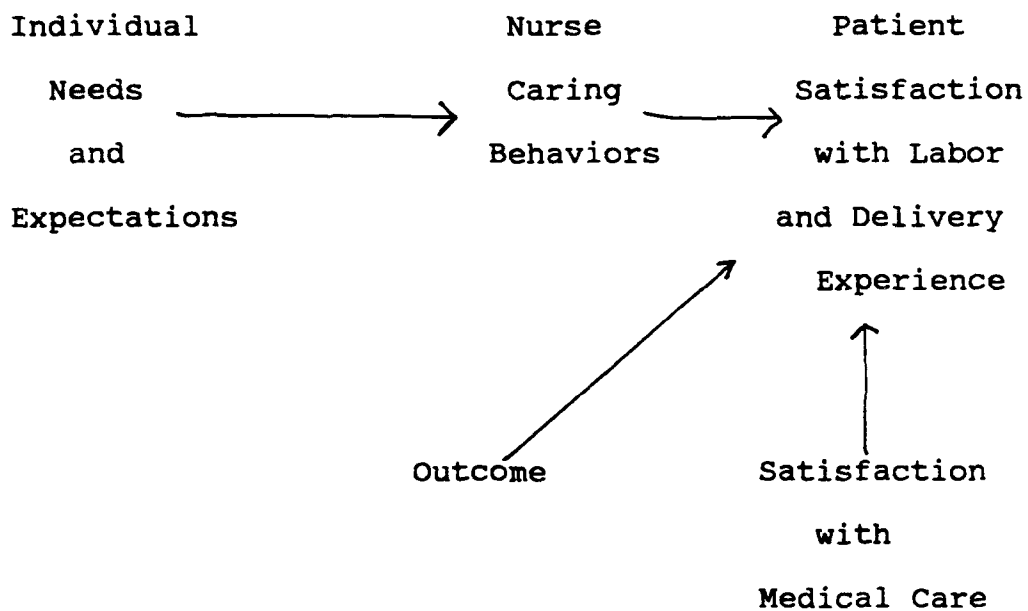
It is interesting that while few studies have been done which focus on nursing, many of the previously mentioned studies found that nursing care

made the most significant impact on childbirth satisfaction. For example, in a study titled Satisfaction with Medical Care During Pregnancy and Delivery, investigators found that the greatest percentage of women in their sample expressed satisfaction with the amount of individualized attention they received from the hospital staff (nurses) during labor (Light, Solheim, & Hunter, 1975). Since it has been demonstrated to be an important factor, nursing's relationship with childbirth satisfaction needs to be studied more closely.

Watson (1979) developed the Theory of Human Care which described nurse caring behaviors and theoretically related them to patients' outcome. Watson's carative factors form the foundation for the conceptual framework of this study. In order to examine nursing's impact on childbirth satisfaction, nurse caring behaviors will represent nursing. The purpose of this study is to describe the relationship between patients' perceptions of nurse caring behaviors and patient satisfaction with labor and

delivery.

### Conceptual Framework



### Assumptions

1. Caring exists in reality and in nursing behavior.
2. Caring is a humanistic and interpersonal process.
3. As stated by Watson (1979), "The practice of caring is central to nursing".
4. Caring can be measured.

### Research Question

What is the relationship between patients' perceptions of nurse caring behaviors and patient satisfaction with labor and delivery?

### Definition of Terms

#### Theoretical

##### Nurse caring behaviors.

Nurse caring behaviors are those actions, conduct, or mannerisms that the professional nurse uses in the delivery of health care to the patient. Watson (1979) described these behaviors as carative factors. Ten carative factors are used by nurses in the caring process to help the patient "attain (or maintain) health or die a peaceful death". The carative factors are listed in the review of the literature.

##### Patient Satisfaction.

Donabedian (1966) defined patient satisfaction as "the provider's success at meeting client values and expectations, which are matters on which the client is the ultimate authority".

Operational

Nurse caring behaviors.

Nurse caring behaviors will be operationalized by a score on Duffy's (1990) Caring Assessment Tool, which was derived from Watson's ten carative factors.

Patient Satisfaction.

Patient satisfaction will be operationalized by a score on the Patient Satisfaction Visual Analog Scale developed by the investigators based on a similar scale by Oberst (1984).

Significance

Results of this study will help describe the relationship between nursing represented as nurse caring behaviors and patient satisfaction with the labor and delivery experience. Findings will increase the body of nursing knowledge and in this case will enable nurses to increase patients' satisfaction by increasing behaviors patients identify as caring.

From a broader perspective, documentation of a strong positive relationship between nursing and



patient satisfaction with labor and delivery may lead to changes in hospital administrations' approaches to improving obstetrical services. If nursing services are shown to play a major role in influencing patients' satisfaction, then hospital's should invest in nursing in order to increase their share of the consumer market.

## Review of the Literature

### Introduction

The purpose of this chapter is to review the literature related to this study according to the variables of caring and patient satisfaction. The section on caring addresses (a) the theoretical perspectives, (b) patient identified nurse caring behaviors, and (c) nurse identified nurse caring behaviors. The section on patient satisfaction addresses the research done by nurses, physicians, and sociologists on patient satisfaction with health care and then focuses on the research done on patient satisfaction with childbirth.

Caring

Theoretical Perspectives on Caring

Mayeroff in 1971 described caring as "helping another grow and actualize himself" (p.1). He explained that in the process of caring for another, a committed relationship is formed in which one learns about the needs of another and how to respond to those needs. This relationship is characterized by patience, honesty, trust, humility, hope, and courage. In this type of devoted, selfless relationship in which one helps another grow, he/she also grows and actualizes himself/herself.

Leininger's definition of caring is very similar to Mayeroff's. She states that caring comprises "those human acts and processes which provide assistance to another individual or group based on an interest in or concern for that human being(s) or to meet an expressed, obvious, or anticipated need"(1980,p.136). Leininger theorizes that caring has always been a critical factor in the survival of the human race and continues to be essential for man's health, growth, and well-being.

According to Leininger (1980)," professional caring embodies the cognitive and deliberate goals, processes and acts of professional persons or groups providing assistance, expressing attitudes and actions of concern for individuals and groups to support their well being, alleviate undue discomforts and meet obvious anticipated needs" (p.136). She found that most health care professionals use the terms care or caring when they describe what they do for patients but nursing has used this term most consistently for more than a century. Nursing's domain has been caring and medicine's domain has been curing. Leininger (1980) believes that caring "is essential to curing and pervades all efforts to help an individual recover after an illness and be cured" (p.141).

As a result of her ethnographic studies, Leininger (1980) found that professional caring behaviors varied considerably between cultures but included some or all of the following: "comfort, support, attention, compassion, touch, love, protection, surveillance, personalized health,

nurturance, stress alleviation, restoration, tenderness, trust, instruction, maintaining well being, succorance, empathy, direct assistance (or helping acts), stimulation, helping the dependent, presence, and medical-technical assistance" (p.138).

Watson (1979) developed the Theory of Human Care in which she described nurse caring as a humanistic and interpersonal process that effects a positive health change in the client/patient. This therapeutic interaction is referred to as the "core" of nursing, whereas the "trim" of nursing refers to specific procedures, technology, and practices that vary between nurse specialties or health care settings.

Watson (1979) stated that caring consists of carative factors or nursing care behaviors that result in the satisfaction of certain needs. These carative factors are listed below:

1. The formation of humanistic-altruistic systems of values.
2. The instillation of faith-hope.

3. The cultivation of sensitivity to one's self and to others.
4. The development of a helping-trust relationship.
5. The promotion and acceptance of the expression of positive and negative feelings.
6. The systematic use of the scientific problem-solving method for decision making.
7. The promotion of interpersonal teaching-learning.
8. The provision for a supportive, protective, and(or) corrective mental, physical, sociocultural, and spiritual environment.
9. Assistance with the gratification of human needs.
10. The allowance for existential-phenomenological forces.

(p.9-10)

Watson's carative factors include caring behaviors that are considered both expressive and instrumental (Mayer, 1986). Expressive behaviors or activities are those involved with establishing a relationship ( i.e. faith, hope, trust) or providing support or comfort to a patient/client. Instrumental behaviors are more concrete activities such as teaching, administering medications, or problem solving. In this sense nurse caring behaviors can be physical, procedural, objective, and factual, but ideally during these nurse caring activities the nurse can "make contact with the person's emotional and subjective world" through empathetic inference(Watson,1988,p.55). When this contact with the subjective world goes beyond bodily or mental-emotional interaction and reaches out to encompass the soul or spirit of both experiencing persons, then transpersonal caring occurs (Watson,1988,p58). The goals of transpersonal caring relationships are restoration of inner harmony within the mind, body, and soul; gaining of self knowledge; and protection/enhancement of humanity.

Not all nurse-patient interactions are on the spiritual level as described by Watson ( Rieman, Drew). The level of caring activities varies from nurse to nurse and situation to situation. According to Benner(1984), much depends on the nurse's level of skill proficiency: novice, advanced, beginner, competent, proficient, and expert. Proficiency is basically a reflection of experience. Novice nurses are very much concerned with successful completion of instrumental activities, but the expert nurse has the ability to combine instrumental and expressive activities during her caring interaction.

Caring provided by nurses in a relationship based on mutual respect and trust has transformative, integrative, advocacy, healing, participative/affirmative, and problem solving power(Benner,1984,p.210). In fact, according to Benner (1984,p.216), "a patient can have a very skilled, knowledgeable physician, but if the nurse is lacking in diagnostic, monitoring, or therapeutic skills--and,most serious of all, if the nurse does not care--the patient's chances for recovery, or for

dignity and comfort in dying, are slim."

In essence then, without caring there can be no curing, but what specific nurse caring behaviors make patients feel cared for and about?

#### Patient Perceptions of Caring

Research on patient perceptions of caring have used both an empirical approach and a phenomenological approach. One of the first phenomenological studies on caring was done by Henry in 1975. O. Henry (1975) asked 50 patients who were receiving nursing care in their home to explain what nurse caring behaviors made them feel cared for and about. The following behaviors were identified in the interview: 1) assessment and observation, 2) carrying out nursing procedures, 3) giving information, 4) informing and activating other care resources, 5) communication on a person-to-person level, 6) making herself accessible and available, 7) patient, 8) friendly, 9) gentle, 10) concerned and interested, 11) conveyed human qualities, and 12) does extra things. O. Henry then categorized these behaviors into "How the Nurse Does," "What the Nurse



Does," and "How Much the Nurse Does." Most of the patient responses fell into the "How the Nurse Does" category-implying that expressive behaviors are more important than instrumental behaviors in making patients feel cared for and about.

Brown's (1981) study of 80 hospitalized patients' perceptions of being cared for and about revealed similar results. Responses to the question fell into two categories--"What the Nurse Does" and "What the Nurse is Like". This study supported the belief that nursing care is made up of both "being" and "doing."

Five studies were done that examined patients with specific problems to see if certain nurse caring behaviors were more important to certain populations. Larson (1984) studied cancer patients and their perceptions of important nurse caring behaviors using her Care-Q instrument. The Care-Q instrument consisted of 50 nursing behavior items that the patient would rank from most important to not important. These behaviors fell under 6 subscales: 1) accessible, 2) explains and facilitates,

3) comforts, 4) trusting, 5) anticipates, 6) monitors and follows through. The patients in this study describe "being accessible" and "monitoring and following through" as the most important nurse caring behaviors. A later study by Larson (1987) and one by Mayer (1986) substantiated these findings with cancer patients.

Cronin and Harrison (1988) conducted a study of 22 patients who had been hospitalized for myocardial infarctions. Patient perceptions of nurse caring behaviors were measured with the Caring Behaviors Assessment tool(CBA). This tool lists 61 caring behaviors ordered in seven subscales that were derived from Watson's carative factors. Face and content validity of the CBA tool were established by a panel of four people familiar with Watson's conceptual model. Reliability was calculated using Cronbach's alpha, and it ranged from .66 to .9.

The subjects were asked to rate each of the caring behaviors on a scale from one to five depending on the degree to which they found that behavior to communicate caring. Patients focused on

monitoring of patient conditions and demonstration of professional competence as the nursing behaviors most indicative of caring.

Swanson-Kauffman (1986) did a phenomenological study of 20 women who had miscarried prior to 16 weeks to identify the caring needs of the women who miscarried. The caring behaviors identified by Swanson-Kauffman were placed into five categories: knowing (understanding the personal meaning of loss in her life), being with (feeling with the woman who miscarried), doing for, enabling (facilitating a woman's capacity to grieve for her loss), and maintaining belief (believing in her capacity to get through the loss and ultimately give birth).

It seems that people who had life threatening health care problems (Larson, Mayer, Cronin & Harrison) more frequently reported instrumental activities of the nurse as indicators of caring. On the other hand, those patients that were receiving home care in Henry's study, and those women who were grieving the loss of a pregnancy revealed expressive nursing behaviors as most important.

When Brown (1986) conducted a phenomenological study involving 50 medical-surgical patients hospitalized with non-life threatening illnesses, eight care themes from the patients' perceptions of being cared for were identified: 1) recognition of individual qualities and needs, 2) reassuring presence, 3) provision of information, 4) demonstration of professional knowledge and skill, 5) assistance with pain, 6) amount of time spent, 7) promotion of autonomy (patient involved in decision making, 8) surveillance. In addition, when most of the patients described incidents in which they felt cared for, they combined several of these themes. Two patterns of combined themes were found. The first included the themes of demonstration of professional knowledge and skill, surveillance, and reassuring presence. This pattern was common to those patients experiencing an immediate threat to his/her physical well-being. The second pattern combined the themes of recognition of individual qualities and needs, promotion of autonomy, and time spent. Brown identified this pattern in incidents where the

primary focus of the interaction did not involve specific treatment needs. Once again, patients speak clearly to the importance of nurses meeting both their instrumental (treatment) needs and their emotional (expressive) needs. Perhaps caring behaviors not only vary in importance to patients with different health care problems, but they may vary in importance in different interactions between the same patient and nurse.

In another phenomenological study conducted in an acute care setting (Paternoster, 1988), patients reported that nurses who cared about them were solicitous, dependable, and cognizant of their needs. In addition, these caring nurses expressed positive nonverbal behaviors and a willing acceptance of their responsibilities. Patients who were cared about felt good, secure, connected and validated.

On the other hand, patients<sup>h</sup> described nurses that were noncaring (Rieman, 1986) as 1) being in a hurry and efficient, 2) being there to just do a job, 3) being rough and belittling patients, 4) not responding, and 5) treating patients as objects. As

a result of noncaring actions, patients felt "humiliated, frightened, and out of control of the situation." Drew (1986) identified the depersonalizing manner in which caregivers disregarded patients' feelings as the process of exclusion. These experiences were energy depleting resulting in patients who were less able to cope with stress. When patients had positive caring experiences in which their feelings and presence were acknowledged by their caregivers, they reported experiencing feelings of hope, comfort, confidence, assurance, sense of ease and relaxation.

The studies by Reiman and Drew are important because they link nurse caring to the emotional well being of the patient. Emotional well-being may help promote patient recovery and therefore positively effect patient outcome.

There has been only one research study to date linking nurse caring and patient outcome. Duffy's unpublished study done in 1990 explored the relationship between nurse caring behaviors and selected outcomes of care. A Caring Assessment Tool

was developed to measure nurse caring. This tool consisted of 100 questions concerning nurse caring behaviors that reflected Watson's ten carative factors. Eighty-six randomly selected medical and/or surgical patients were asked to rate how often each behavior was observed during their hospitalization using a Likert-type scale from 1 (indicating never) to 5 (indicating always). Patients were also asked to indicate how well their expectations were met on a Visual Analog Scale(VAS). The scores from the VAS were used to measure patient satisfaction. The major finding of the study was the positive relationship that existed between the frequency of nurse caring behaviors and patient satisfaction with the hospitalization.

#### Nurses' Perception of Caring

Few studies have been designed to examine nurse perceived nurse caring behaviors. Ford (1981) was one of the first to research this subject. One hundred ninety two nurses from three groups (nurse educators, practicing nurses, and nurse members of the Colorado State Nurses Association) were asked to define

caring, describe caring behaviors, and explain how they modeled these behaviors in their roles. All three groups defined caring as genuine concern for the well-being of another and giving of yourself. Listening was the only caring behavior identified by all three groups; but helping, showing respect, and supporting the actions of others were also listed by many nurses. The nurses said they modeled nurse caring behaviors by listening, helping, communicating, and demonstrating. These findings support the Theory of Human Care.

In an empirical study by Wolf (1986), 97 nurses were asked to rank 75 caring words or phrases on a four point Likert-type scale from strongly disagree to strongly agree. The ten highest ranked words were then listed. They included 1) attentive listening, 2) comforting, 3) honesty and patience, 5) responsibility, 6) providing information to help the client make informed decisions, 7) touch, 8) sensitivity, 9) respect, and 10) calling the patient by name.

Larson (1987) was the only researcher that



examined the difference between cancer patients' and their nurses' perceptions of caring behavior concurrently. Larson's Care-Q instrument (as explained previously) was administered to 57 patients and 57 nurses. Patients valued items such as knowing how to give shots, manage IV's, and knowing when to call the physician more significantly than did nurses. Nurses valued more significantly the items under the comforts subscale and the trusting relationship subscale.

In a phenomenological study conducted by Ray (1987), eight critical care nurses were interviewed regarding the meaning of care in the critical care unit. Caring was seen as "a combination of technology and touch". Consistent with Benner's theory, nurse caring was viewed as a growth and maturation process. It was felt that once the nurse was comfortable with the technology, she could concentrate on the bonding process with the patient and family. This bonding process included touching, comforting, helping, communicating, and just "being with" the patient.

In a similar study (Forrest, 1989), 17 nurses were asked, "What is Caring?" Caring themes that were noted involved being there, respect, feeling with and for, closeness, touching and holding, picking up cues, being firm, teaching, and knowing them well. "Being with", rather than "Doing to", was considered more indicative of caring; however, it was noted that performance of routine tasks took precedence when the patient was 'hard to care for.'

It is evident from these studies that nurses more frequently select expressive caring behaviors to describe caring than do their patients. Nurses' perceptions of caring are consistent with Watson's Theory.

In summary, the studies that have been done on caring have concentrated on describing caring from both the patients' and nurses' perspectives. These studies have employed different methodologies; the empiric studies have used a variety of tools to measure caring; and all the studies have used different terminology. These factors make comparing research findings very difficult.

However, despite these difficulties, some conclusions can be drawn. It seems apparent that caring behaviors can be both expressive and instrumental. The importance of each of these types of behaviors to patients differs with the particular needs of the patient. One can also conclude that nurses tend to see expressive behaviors more than instrumental behaviors as indicative of nurse caring. Finally, very little research has been done linking nurse caring behaviors and patient recovery or satisfaction.

. Patient Satisfaction

The concept of patient satisfaction is becoming increasingly prominent as a result of the consumer movement, however patient satisfaction has been studied by researchers in several fields for many years. Because patient satisfaction's relationship to nursing care is the focus, this literature review will concentrate on the work of nursing researchers, as well as researchers in medicine and sociology. Classic studies will be examined and studies illustrating issues important to patient satisfaction

will be reviewed. Finally, a broad range of childbirth satisfaction research will be critiqued, so that a direction for future research in this area can be identified.

#### A Definition of Patient Satisfaction

The lack of consensus on a definition of patient satisfaction is a readily apparent problem. Ware, Davies-Avery, and Stewart (1978) completed a comprehensive review of patient satisfaction literature that made apparent the many constructs studied under the label of patient satisfaction, but did not present a definition.

The primary objective of Linder-Pelz's "Toward A Theory Of Patient Satisfaction" was to define the concept of patient satisfaction. Linder-Pelz (1982) emphasized the importance of defining the term when making the statement, "First, before valid measures of a construct such as patient satisfaction can be developed and interpreted, it is necessary to explicitly define that construct." Linder-Pelz defined patient satisfaction as "the individual's positive evaluations of distinct dimensions of health

care"(1982). Unfortunately, when the social psychological variables underlying the definition were tested, they explained only a small proportion of the variance in satisfaction (1982).

A number of other researchers have addressed the problem of a patient satisfaction definition. In a literature review, Pascoe (1983) recognized that patient satisfaction research has not been guided by a well-supported definition. Gutek (1978) suggested exploring the cognitive meaning of satisfaction, while Fox and Storms (1981) recommended understanding the "central fact of satisfaction."

Since this issue has not been resolved it is common for researchers to create their own definitions of patient satisfaction. These definitions will be mentioned when the studies that include them are reviewed.

#### Historical Overview

Satisfaction research has not always been centered on patients. Patient satisfaction research developed from job satisfaction research. In fact, the largest number of theoretical and empirical

studies of satisfaction is in relation to jobs/work (Linder-Pelz, 1982). While satisfaction research by physicians and nurses is more prevalent now, sociologists are responsible for a majority of the original work.

In the field of medicine, the idea of looking at patient satisfaction surfaced when physicians started assessing medical care quality. Donabedian (1966) was first to apply the structure, process, outcome model of evaluation to the assessment of medical care quality. Subsequently, this framework has been widely adopted for evaluating nursing care quality (Eriksen, 1987). Patient satisfaction as a measure of quality has been studied from the beginning of research in medicine and nursing. The issue of quality assurance and its relationship to patient satisfaction will be explored later in this paper.

#### Classic Nursing Research On Patient Satisfaction

Abdellah and Levine laid the foundation for nursing research on patient satisfaction. They used a multiple linear regression model to determine the relationship between satisfaction with nursing care

and the variables influencing it. Using a sample of 60 hospitals, they found that while the amount of total nursing hours (including nursing assistants) provided per patient each day did not affect the amount of satisfaction with nursing care, the amount of professional nursing care provided does have a strong positive influence on satisfaction (1957).

For this study, Abdellah and Levine created The Patient Satisfaction with Nursing Care Check List (PSWNC). Their studies provided evidence of the tool's concurrent or predictive validity, however no estimates of reliability or validity have been reported (Eriksen, 1987). This was the first nursing research-based instrument used to measure patient satisfaction and it is still being utilized in current studies.

The tool developed by Risser in 1975 has been the major nursing measurement of satisfaction. Risser defined satisfaction as an attitude that reflects the degree of congruence between patients' expectations and their perceptions of nursing care received (ideal versus real). Three aspects of

patient satisfaction with nurses were identified including the technical-professional factor, the educational relationship, and the trusting relationship between the nurse and patient (Risser, 1975).

Risser developed 25 items from patient interviews, literature review, and similar scales to measure the three aspects. The items were scrutinized through two trials and criteria such as representativeness of content definition, ability to discriminate between respondents, internal consistency, and variability were verified. Cronbach's alpha measured reliability coefficients and Scott's homogeneity ratios were obtained for the scales made up of the 25 items (1975).

While Risser has created a sound instrument, there is at least one significant criticism of her tool. The items on Risser's tool reflect a heavy emphasis on dependent (physician-driven) functions, instead of independent or interdependent nursing functions (Eck, Meehan, Zigmund, and Pierro, 1988). Revising Risser's tool to reflect the autonomy of



today's nurse is a challenge facing nurse researchers who continue to work on patient satisfaction instrument development.

Hinshaw and Atwood (1982) revised Risser's tool to measure patient satisfaction with inpatient nurses and nursing care. The basic conceptual framework or structure of the instrument was not changed. The Patient Satisfaction Instrument (PSI) was used in five studies over a period of eight years, with 600 patients. This process is an example of measurement precision by replication.

The PSI is a Likert-type summated scale rating the same three aspects of patient satisfaction identified by Risser. Hinshaw and Atwood looked at the internal consistency, construct validity, and discriminance of the PSI over the course of the five studies. The PSI had acceptable levels of validity and reliability with suggestions for revisions (1982). Hinshaw and Atwood's PSI has become a popular nursing patient satisfaction measure. Many studies replicating research with the PSI have been conducted.

More Nursing Research On Patient Satisfaction Scales

Bader (1988) conducted a study based on Risser's conceptual framework for patient satisfaction. The PSI was administered to a convenience sample of 50 individuals hospitalized on a medical/surgical unit. Stepwise multiple regression revealed that none of the demographic data could be considered predictors of patient satisfaction. This result is consistent with other studies that have found nonexistent or inconsistent impact of demographic variables in the area of patient satisfaction (Abramowitz, Cote, & Berry, 1987; Doering, 1983).

Grand means were calculated for each subscale (trust  $X = 4.08$ ; patient education  $X = 3.86$ ; professional/technical  $X = 4.06$ ). Bader concluded that the lower grand mean for the patient education subscale indicates that this area is least satisfying (1988). Bader also found that of fifteen predictor variables, all but three were related to the trust subscale of nursing care; the other three were instrumental activities from the professional/technical subscale (1988).

This means that the affective dimension of nursing was most important to Bader's subjects. This supports findings by Mangen and Griffith (1982), and Oberst (1984) that satisfaction with nursing care is based to a large extent on perception of the nurse's affective behavior toward the patient (Bader, 1988).

In 1986, La Monica, Oberst, Madea, and Wolf published a report of three studies conducted in an effort to produce a more valid, reliable, and sensitive measure of patient satisfaction. The La Monica-Oberst Patient Satisfaction Scale (LOPSS) was developed from the Risser Patient Satisfaction Scale (PSS).

The first study led to refinement of the instrument. The second study was done to assess the instrument's internal consistency. The alpha coefficients for the three subscales, as well as the total instrument, were acceptably high. They also found that the technical-professional and trust subscales appeared to measure overlapping domains in their sample.

La Monica et al's third study conducted on a

sample of 710 patients hospitalized for cancer treatment was the most significant research. Comparing the performance of the LOPSS in this study with that of Risser's PSS in other studies revealed that both tools had almost identical score ranges, skewness, variability, and location of mean. This means the goal of greater sensitivity was not achieved. Findings from the factor analysis clearly did not support the construct validity of the three dimensions of nurse performance as contributing to patient satisfaction.

The positive outcome of the third study was that three new factors were identified: dissatisfaction, interpersonal support, and good impression. The reliability coefficients for the subscales and the total instrument exhibited high internal consistency. The dissatisfaction subscale explained 73.6% of the variance (La Monica et al., 1986). Not only is the LOPSS a methodologically solid tool, it also represents a tool that measures more independent nursing functions than Risser's physician-driven subscales.

The Latest Research On Patient Satisfaction And  
Nursing

In 1987, Abramowitz, Cote, and Berry carried out a study to explore the utility and reliability of a newly designed instrument measuring patient satisfaction with a variety of aspects of hospital care. This study is significant because it is the largest study of hospitalized patients reported, and because it has the highest response rate (91%). A professional research market firm was used to conduct a telephone survey, which probably accounts for the high response rate. The study measured attribute satisfaction for ten services including admission, attending physicians, house staff, nurses, nurse's aides, housekeeping, food services, escort, other staff, and miscellaneous services on a sample of 841 discharged patients. Correlational analysis assessed inter-item relationships and determined good reliability of the scale items.

This research is significant to nursing because of all the types of services being investigated, only one was directly related to overall satisfaction with

a hospital stay: nursing services (Abramowitz et al., 1987). The authors described nurses as the hospital's goodwill ambassadors and frontline representatives. It was explained that to the extent that nurses cannot fulfill this role, patient satisfaction is severely compromised.

Another current nursing research study looked at patient satisfaction from a completely different perspective. Derdarian (1990) believed that patient and nurse satisfaction with care need to be analyzed separately, unlike Abramowitz who measured them among several other services.

A 1990 research study by Derdarian showed that statistically significant increases in patient and nurse satisfaction occurred when the Derdarian Behavioral System Model (DBSM) and DBSM-O (observational component) were used. In a three-phase study, Derdarian used a single-group, pre- and postintervention quasi-experimental design to determine the effects of using systematic assessment instruments on patient and nurse satisfaction with the nursing process.

There were three intervention variables: the DBSM, the DBSM-O and the clinical instrument routinely used by the institution. The dependent variables of comprehensiveness, system of process, patient satisfaction, and nurse satisfaction were measured by four instruments. Comprehensiveness and content validity of all the instruments were re-estimated by three nurse experts and two patients. Internal consistency, interrater reliability, internurse reliability, and interexpert reliability were all rated as high by independent expert panels (Derdiarian, 1990).

Derdiarian claimed absence of control groups, randomly selected nurse and patient samples, and random nurse-patient matches as limitations of the investigation (1990). Methodology for determining reliability and validity also appears to be questionable. Derdiarian's research supports the hypotheses, but the study itself is problematic. Overall, the use of so many new instruments limits the generalizability of her work.

In the past two years, Petersen has become a

frequently published nurse-author in the field of patient satisfaction. Petersen's articles give clear guidance for nurses to establish ongoing patient satisfaction evaluation. The most applicable, current studies are summarized in Petersen's suggested approaches for studying patient satisfaction.

Peterson has not done any research. Her easily understandable writing style and solid patient satisfaction research literature background indicate her potential for significant work in this area. Perhaps the classic nursing research on patient satisfaction of the 1990's will be written by Petersen.

#### Other Experts In The Field Of Patient Satisfaction

A review of patient satisfaction literature limited to nursing research would provide only a partial view of the total picture. A majority of the work done in this area has been by experts outside of nursing. These experts have completed decades of research covering some of the most interesting aspects of patient satisfaction. This research will



be reviewed here.

Donabedian (1966) set the trend for some of the medical research on patient satisfaction with the practice of critically analyzing the methodology for assessing quality of medical care. In an assessment of methodology used at that time, Donabedian compiled one of the first comprehensive reviews of the literature. This practice has been repeated by Ware et al. (1978) and Pascoe (1983) who are responsible for two of the most important patient satisfaction literature reviews to date.

A major contribution of Ware et al's review was the identification of ten constructs that were being measured under the label of patient satisfaction. The constructs were accessibility/convenience, availability of resources, continuity of care, efficacy/outcomes of care, finances, humaneness, information gathering, information giving, pleasantness of surroundings, and quality/competence. Identifying the ten constructs was an important step because it made apparent patient satisfaction's multidimensionality.

Pascoe and Attkisson (1983) pointed out that while the collective evidence indicates that patient satisfaction is multidimensional, patient satisfaction studies have generally not assessed multiple dimensions. Hulka, Zyzanski, Cassel, and Thompson (1970) and Ware, Snyder, and Wright (1975) are two exceptions.

Hulka et al. (1970) used the Thurstone Method of Equal Appearing Intervals to develop a scale to measure attitudes toward physicians and primary medical care. Statements were evaluated for favorable or unfavorable attitudes. The dimensions of personal qualities of physicians, professional competence of physicians, and cost/convenience were determined. An agree-disagree format was utilized to rate the scale items.

Ware et al. (1975) also assessed patients' attitudes toward medical care. A factor analyses was performed which revealed numerous index scores to measure patients' attitudes toward their care. Twenty attitudinal indices were factor analyzed and rotated including availability of services,

continuity/convenience of care, physician conduct, financial considerations and emergency care access.

Unfortunately, there are some problems with Hulka et al.'s (1970) and Ware et al.'s (1975) instruments. The instruments survey generalized satisfaction with overall health care rather than evaluating a specific health care direct experience (Westbrook & Oliver, 1981). Another problem involves the psychometric quality of the two questionnaires. Stamps and Finkelstein (1981) questioned the integrity of the Ware tool and asserted that the Hulka questionnaire lacked enough validity to be used for predictive purposes in community settings.

Hulka and Zyzanski (1982) responded to this criticism with a rebuttal. They observed that in Stamp and Finkelstein's analysis validity could only be achieved through a unidimensional framework. Hulka and Zyzanski went on to emphasize the impossibility of the human mind summing up such diverse output as attitudes toward physicians and medical care in a unidimensional framework (1982).

After Pascoe and Attkisson (1983) identified the need for an instrument that would assess multiple dimensions of patient satisfaction, a new methodology was established for assessing satisfaction. The Evaluation Ranking Scale (ERS) was tested by a 2 x 3 design with 246 public health patients randomly assigned to one of two measurement techniques (ERS versus a global measure) and one of three informational sets. A convenience sample of 26 staff members allowed for comparisons of staff and patients' evaluations of the health center.

Results demonstrated that compared to the global measure, the ERS provided more specific information about particular program components, was more discriminating, and resulted in mean satisfaction scores that were significantly lower. Lower satisfaction scores were actually a positive finding in this case because of the concern that most patient satisfaction scales produce high, undifferentiated levels of reported satisfaction that fail to detect program areas that consumers do not like (Pascoe & Attkisson, 1983).

Mangelsdorff (1979) based his research on the work of Hulka et al. (1970) and Ware et al. (1975). Factor analytic techniques were used to develop the Patient Satisfaction Questionnaire (PSQ). The nineteen item questionnaire used a Likert scale and had a coefficient alpha of .972 overall, indicating high internal reliability. Validity was demonstrated using correlations with specific criterion items. Three factors were identified: physician interactions, nonphysician interactions, and ancillary services.

Mangelsdorff observed that his three factors overlapped with some of the common dimensions of patient attitudes identified in other studies. "Physician interactions" overlapped the major content area "Personal qualities" described by Hulka, et al. (1970) and with several rotated common factors identified by Ware, et al. (1975), specifically "Physician conduct," "Continuity/convenience of care," and "Access mechanisms." The replication of findings in Mangelsdorff's research supports the work of the previous investigators.

Besides its reliability and validity, other strengths of Mangelsdorff research should be recognized. Mangelsdorff was able to refine his instrument through repeated trials on very large samples. Sample size ranged between 1,000 and over 3,000. Another strength was the use of interviewing to substantiate the questionnaire findings. 5,095 persons interviewed corroborated questionnaire findings of high satisfaction.

Another study by Pascoe, Attkisson, and Roberts (1983) compares indirect and direct approaches to the measurement of patient satisfaction. An indirect approach contains items that refer to health care providers in general or to aspects of medical care at a more macro level (Westbrook & Oliver, 1981). In contrast, a more direct approach contains items that refer specifically to care actually received. Controversy exists over the use of an indirect approach with general referents to measure care actually received.

The three measures used in the study were the Patient Satisfaction Questionnaire (PSQ) (Ware et

al., 1975), the Evaluation Ranking Scale (ERS) (Pascoe & Attkisson, 1983), and the Client Satisfaction Questionnaire (CSQ-18B) (LeVois, Nguyen, & Attkisson, 1981). The indirect PSQ and direct CSQ-18B and ERS measures were compared across a series of psychometric, concurrent validity and acceptability criteria.

Results indicated that the direct and indirect approaches measure different satisfaction domains. The indirect PSQ assesses more generalized attitudes about health services while the CSQ-18B and the ERS efficiently indicate opinions about the specific setting in which they were administered (Pascoe, et al., 1983). Thus, it has been demonstrated that indirect measures using general referents are not appropriate for evaluation of actual health care received.

Another phenomena explored in the research is that ratings of medical care received personally (personal referent) yield more favorable responses than ratings of care received by people in general (general referent) (Hays & Ware, 1986). So, general

items are useful in achieving greater variation in responses to satisfaction surveys. Hays and Ware hypothesized that bias due to socially desirable response set (SDRS) would be greatest for items with a personal referent.

To test the hypothesis, Hays and Ware compared both kinds of satisfaction ratings with a sample of 3,918 individuals who scored high and low on SDRS during Rand's Health Insurance Experiment. Across six sites and during eight years of the experiment, the rating item with a personal referent was consistently biased upward for manifesting SDRS. This did not hold true for the general referent item. Correlation between SDRS and the difference between ratings on the personal and general referent items was statistically significant, demonstrating that more favorable ratings of medical care received personally compared with ratings of care received by people in general are in part due to SDRS bias (Hays & Ware, 1986).

Review of the medical care studies has broadened our perspective of patient satisfaction literature.



Several instruments were surveyed which will aid in future tool selection. An understanding of concepts such as multidimensionality, personal and general referents, direct and indirect approaches, and socially desirable response set, to name a few, will benefit further inquiry on this subject.

#### Childbirth Satisfaction Research

During the 1970s, a growing unrest with standard maternity care led some researchers to the conclusion that a rational, unbiased review of doctors, nurses and care received was in order. Thus, childbirth satisfaction research has developed out of society's demand for change in maternity care. The medical profession was first to feel the need to investigate this area, probably because it was receiving the most criticism. While nurses are without a doubt interested in this subject, they have not been responsible for much significant research on the topic. The following review of the progress in childbirth satisfaction research will lead to suggestions for future nursing research on this subject.

In 1976, Light, Solheim, and Hunter set out to determine satisfaction of maternity patients with medical care they received during pregnancy and delivery. Satisfaction was defined as a generalized positive attitude toward a situation and persons involved in that situation (Light et al., 1976). Doctor care during pregnancy, doctor care during labor and delivery, hospital care during labor, and hospital care during and following delivery were chosen as categories for investigation.

A Likert-type rating scale and open-ended questions used to determine satisfaction were administered to 291 maternity patients during their stay in five midwestern hospitals. Frequency counts and percentages were used for data analysis. Statistical differences were determined by the chi-square test.

Considering that this study was focused on doctors, the findings are very interesting for nursing. Comparing the two categories concerned with doctor care with the two categories concerned with hospital care, there were generally

higher percentages of satisfaction as a whole for hospital care. 85 per cent of the subjects were satisfied with hospital staff explanations of procedures during labor whereas only 62 per cent were satisfied with the doctors' explanations. On another item, almost 85 per cent of the subjects were satisfied that the hospital staff understood their feelings during labor and delivery while only 69.9 per cent were satisfied that the doctor understood their feelings. Finally, comparison of all of the percentages showed that the greatest percentage of women (92.2) expressed satisfaction with the amount of individualized attention they received from the hospital staff during labor (Light et al., 1976).

Aside from the results, an interesting feature of this study is the authors' choice of "hospital care" to represent what must be nursing care in the study. Since the results demonstrate what a strong, positive contribution is made by nurses they should be identified as nurses in research of this kind. Besides semantics, the simplistic analysis of data is a limitation of the investigation. Another drawback

is the timing of questionnaire completion during the hospitalization. The presence of possibly invalidly high satisfaction ratings during hospitalization will be further discussed later. A strength of the investigation is the generalizability possible due to the use of a fairly large sample drawn from a rather large geographic area. In general, it serves as a good starting point for research in this area.

A nursing study of childbirth satisfaction completed by Humenick and Bugen (1981) looked at The Mastery Model as the key to childbirth satisfaction. The two modalities of instrumentality and expressiveness were measured. Instrumentality refers to self-assertion, self-protection, and self-explanation. Expressiveness refers to a concern for merging with the needs of others.

A sample composed of 33 members of a Lamaze class completed six instruments between the end of their Lamaze classes and three weeks postpartum. The instruments were previously trialed with acceptable levels of reliability and validity for use in this study.

Results partially supported the authors' first hypothesis that the mother's prenatal attitude did significantly predict her evaluation of the labor and delivery. The mother's perceived control during this experience was not predicted. The second hypothesis was not supported in that the mother's prenatal propensity for instrumental behavior did not predict either perception of control or evaluation of the birth. The third hypothesis that there would be a change in a primigravida's score on an instrumental behavior scale which is related to her childbirth rating experience was supported (Humenick & Bugen, 1981).

The authors offered several limitations of the work, including a purely observational design and a convenience sample with all highly educated and motivated subjects coming from one community. From an alternate perspective, the attempt to identify the Mastery Model as the key to childbirth satisfaction made it virtually impossible to understand how childbirth satisfaction was effected by the factors that were measured. The guiding concepts of

instrumentality and expressiveness only served to further confuse the reader. Unfortunately for nursing, this study did not further advance the understanding of childbirth satisfaction.

In another nursing study, Sullivan and Beeman (1982) set out to determine the level of satisfaction with maternity care and whether satisfaction was related to communication patterns with caretakers and to specific clinical procedures used during labor and delivery.

3,773 questionnaires were sent to all women who had been issued a birth certificate during a one month time frame. The return rate was 52.4 per cent. The authors identified a conservative bias in the analysis due to the underrepresentation of low socioeconomic groups. Contingency table analysis was used to explore the relationship between satisfaction with care and communication patterns and clinical procedures. Chi-square tests evaluated associations and Cramer's V measured the strength of associations (Sullivan & Beeman, 1982).

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Overall evaluation of care was extremely positive. A closer look at the results lead to some important observations. It was noted that many women who made unsolicited highly negative comments still checked "satisfied" in response to a question evaluating overall labor and delivery care (Sullivan & Beeman, 1982). This demonstrates the phenomenon of reluctance to criticize caregivers, which results in the invalidly high satisfaction ratings previously mentioned. This also demonstrates the need for a "dissatisfied" choice on patient satisfaction rating scales.

Another explanation for high satisfaction ratings is that the arrival of a healthy baby legitimizes the entire pregnancy experience and creates a favorable halo effect (Sullivan & Beeman, 1982). This may be responsible for an upward bias in childbirth satisfaction research.

Sullivan and Beeman (1982) also found that when patients had made a choice regarding clinical procedures they were more dissatisfied when these choices were not honored. Another interesting

observation is that a desire for rapport, flexibility, and fulfillment of clinical preferences were strongly associated with satisfaction. This was an especially important finding because it serves as measurable evidence that changes in maternity care were desired by a sample of the population who had just completed a traditional obstetric experience.

The significance of interview timing in childbirth research was studied by Bennett (1985). Seventy-two women who had been interviewed three weeks postpartum were re-interviewed two years after the birth. Bennett found a significant decrease over time in their ratings of medical care and clinical procedures.

Although there were problems with the study's methodology related to small sample size and attrition of sample members over time, the study still makes the noteworthy statement that it is important to consider timing of data collection in childbirth research.

In her 1985 article Assessing Satisfaction With Childbirth, Lumley addresses some pertinent issues.



She advises against in-hospital studies because patients may fear neglect of themselves or their baby if they are too critical. This may seem like an unnecessary fear to nurses considering a research design, but it is probably a real factor to consider.

Lumley (1985) recommends interviewing for a few reasons. Reference is made to evidence that fixed-scale questionnaires elicit fewer negative responses than do open-ended interviews. Being able to probe subjects responses is another advantage, as well as collecting more interesting data. Lumley contributes several suggestions that may be helpful in designing childbirth research.

In the most recent study available on women's satisfaction with maternity care, Seguin, Therrien, Champagne and Larouche (1989) studied a representative sample of 1790 women from the Montreal area who had delivered four to seven months earlier using a mailed questionnaire. Five dimensions of women's satisfaction were factor analyzed including: the delivery itself, medical care, nursing care, information received and participation in the

decision-making process, and physical aspects of the labor and delivery rooms. Multiple regression analysis was used to identify explicative factors of each dimension.

Seguin et al. (1989) found that information received was the subjects' major component of satisfaction with nursing care. In fact, the highest satisfaction ratings were for nursing care. Another interesting finding was that the physical environment did not affect women's satisfaction with their care. These two results can have a significant effect on the way maternity care is delivered. The fact that physical environment did not affect satisfaction means that freshly renovated birthing suites will not improve women's perceptions of their childbirth. The significance of information relay by nurses means that nursing can make the difference in women's satisfaction with their childbirth experience if they will continue to spend time at the bedside communicating with their patients.

### In Conclusion

In the 1990s, when consumers' satisfaction with health care means survival or failure for the health care provider, it is vital that nurses identify consumers' expectations. This literature review has examined many of the factors that effect patient satisfaction. Once predictors of satisfaction are identified nurses should be able to use this information to change their care accordingly. Many of the studies reviewed indicated that nurses have a positive effect on patient satisfaction. Further studies will help narrow down specific nursing behaviors that make the most significant contribution to this general trend.

Patient satisfaction is a very broad subject, but it holds several areas that need further examination. Research that deals with the relationship between childbirth satisfaction and nursing is sorely needed. A foundation for this work exists, but it needs to be built upon. The proposed research study will identify nurse caring behaviors and their relationship to childbirth satisfaction.

The variety of research that has been reviewed will guide design development, instrument selection, and data analysis.

## Methodology

### Purpose of the study

The purpose of this study is to describe the relationship between patients' perceptions of nurse caring behaviors and patient satisfaction during labor and delivery.

### Research Question

What is the relationship between patients' perceptions of nurse caring behaviors and patient satisfaction during labor and delivery?

### Design

A descriptive correlational study will be done using 30 subjects from a large metropolitan university hospital. The sample population consists of women on the postpartum unit at Georgetown University Hospital who deliver a liveborn baby between January 1991 and May 1991. Women who have C-sections will be excluded.

### Variables

The variables in this study are nurse caring behaviors and patient satisfaction. Nurse caring behaviors are operationalized by a score on

Duffy's(1990) Caring Assessment Tool(CAT). Patient satisfaction will be operationalized by a score on the Patient Satisfaction Visual Analog Scale.

### Instrumentation

The Caring Assessment Tool is composed of 100 questions reflecting Watson's ten carative factors (Watson, 1979). The patient indicates how frequently she experienced each of these nurse caring behaviors using a five point Likert-type scale (Likert, 1932). Scores can range from one (never) to five (always) with a possible total scoring range of 100-500. The tool is written at the eighth grade reading level.

Cronbach's coefficient alpha (Cronbach,1970) was employed to test for internal consistency. The overall coefficient alpha was .9667. Face validity and content validity were supported in Duffy's 1990 study by a panel of eight experts on the construct of caring. Some of the words in Duffy's CAT were changed to reflect the labor and delivery setting. These changes were reviewed and approved by Duffy.

The Patient Satisfaction Visual Analog Scale (Oberst,1984;Duffy,1990) will be used to measure

patient satisfaction. This tool consists of a one item, horizontal ten centimeter line. Opposite statements at either end of the line read "care did not meet my expectations" and "care far exceeded my expectations". Subjects will identify how well their expectations were met by making a mark on the visual analog scale. Scores are derived by measuring distance in centimeters from the left side of the scale to the right.

There is much controversy over the measurement of patient satisfaction due to the subjectivity that effects it. The visual analog scale was chosen to measure patient satisfaction because research has shown that visual analog scales best reflect subjective data (Gift,1989).

#### Procedure

The charge nurse of the postpartum unit will be approached by the investigators for a list of women who delivered vaginally and are now one day postpartum. Two subjects will be randomly selected from the list.

Subjects will be approached by the investigator

who will explain the purpose of the study and obtain informed consent. Participants will spend approximately 30 minutes completing the three paper and pencil surveys which include the Caring Assessment Tool, the Patient Satisfaction Visual Analog Scale, and the patient information (demographic) form. Investigators will collect the surveys after they are completed later the same day. Surveys will be performed four days a week in the afternoon beginning January 1991. All data will be collected by May 1991.

Limitations

- 1) The generalizability of the study will be limited by sample size and the site of the study. Patients at this site may not reflect the general population in the areas of income, age, and acuity.
- 2) Studies have shown that patient satisfaction research done during the childbirth hospitalization is positively biased due to the usually happy arrival of a healthy newborn. More valid measures of



satisfaction are obtained at least six months postpartum (Lumley,1985).

Protection of Human Subjects

This study will be conducted after approval by the Institutional Review Board of Georgetown University Hospital. Informed consent will be obtained. Subjects will not be exposed to any risks and their anonymity will be protected.

Data Analysis

Descriptive statistics will be utilized to analyze data in the study. Further information on data analysis will be forthcoming.

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Code No. \_\_\_\_\_ (1-4)

Card No. \_\_\_\_\_ (5)

### Patient Survey

CAT

**Directions:** All of the statements in this survey refer to nursing activities. There are five possible responses to each item. They are:

- 5 = Always
- 4 = Frequently
- 3 = Occasionally
- 2 = Rarely
- 1 = Never

For each statement, please circle how often you think each activity occurred during your labor and delivery.

As a patient in labor and delivery, the nurses:

1. Listened to me. (6)  
5 4 3 2 1
2. Accepted me as I am. (7)  
5 4 3 2 1
3. Treated me kindly. (8)  
5 4 3 2 1
4. Ignored me. (9)  
5 4 3 2 1
5. Answered my questions. (10)  
5 4 3 2 1
6. Included me in their discussions. (11)  
5 4 3 2 1
7. Respected me. (12)  
5 4 3 2 1
8. Were more interested in their own problems. (13)  
5 4 3 2 1
9. Paid attention to me. (14)  
5 4 3 2 1
10. Enjoyed taking care of me. (15)  
5 4 3 2 1

Key: 5 = Always  
 4 = Frequently  
 3 = Occasionally  
 2 = Rarely  
 1 = Never

As a patient in labor and delivery, the nurses:

11. Used my name when they talked to me. (16)  
 5 4 3 2 1
12. Were available to me. (17)  
 5 4 3 2 1
13. Had no time for me. (18)  
 5 4 3 2 1
14. Seemed interested in me. (19)  
 5 4 3 2 1
15. Supported my sense of hope. (20)  
 5 4 3 2 1
16. Helped me to believe in myself. (21)  
 5 4 3 2 1
17. Provided me with information. (22)  
 5 4 3 2 1
18. Failed to keep their promises to me. (23)  
 5 4 3 2 1
19. Encouraged me to take care of myself. (24)  
 5 4 3 2 1
20. Supported me with my beliefs. (25)  
 5 4 3 2 1
21. Encouraged me to ask questions. (26)  
 5 4 3 2 1
22. Helped me see some good aspects of my situation. (27)  
 5 4 3 2 1
23. Restricted my need for spiritual support. (28)  
 5 4 3 2 1
24. Encouraged my ability to go on with labor. (29)  
 5 4 3 2 1
25. Anticipated my needs. (30)  
 5 4 3 2 1
26. Allowed me to choose the best time to talk about my concerns. (31)  
 5 4 3 2 1

Key: 5 = Always  
 4 = Frequently  
 3 = Occasionally  
 2 = Rarely  
 1 = Never

As a patient in labor and delivery, the nurses:

27. Openly showed concern for me. (32)  
5 4 3 2 1
28. Were concerned about my family's reaction to my labor and delivery. (33)  
5 4 3 2 1
29. Never showed any emotion. (34)  
5 4 3 2 1
30. Asked me how I liked things done. (35)  
5 4 3 2 1
31. Helped me deal with my bad feelings. (36)  
5 4 3 2 1
32. When appropriate, shared personal information with me. (37)  
5 4 3 2 1
33. Expressed human emotions when they were with me. (38)  
5 4 3 2 1
34. Responded honestly to my questions. (39)  
5 4 3 2 1
35. Initiated conversations with me. (40)  
5 4 3 2 1
36. Did not judge me. (41)  
5 4 3 2 1
37. Checked on me frequently. (42)  
5 4 3 2 1
38. Looked me in the eye when they talked to me. (43)  
5 4 3 2 1
39. Refused to tell me aspects about my labor and delivery when I asked. (44)  
5 4 3 2 1

Key: 5 = Always  
 4 = Frequently  
 3 = Occasionally  
 2 = Fairly  
 1 = Never

As a patient in labor and delivery, the nurses:

40. Paid attention to me when I was talking. (45)  
5 4 3 2 1
41. Were responsive to my family. (46)  
5 4 3 2 1
42. Acted as if they disapproved of me. (47)  
5 4 3 2 1
43. Talked openly to my family. (48)  
5 4 3 2 1
44. Encouraged me to talk about whatever was  
on my mind. (49)  
5 4 3 2 1
45. Were patient with me even when I was difficult. (50)  
5 4 3 2 1
46. Were interested in information I had to offer  
about my labor and delivery. (51)  
5 4 3 2 1
47. Talked about me openly in front of other  
patients. (52)  
5 4 3 2 1
48. Accepted what I said, even if it was negative. (53)  
5 4 3 2 1
49. Seemed annoyed if I spoke my true feelings. (54)  
5 4 3 2 1
50. Were aware of my feelings. (55)  
5 4 3 2 1
51. Did not want to talk to me. (56)  
5 4 3 2 1
52. Allowed me to talk about my true feelings  
without any risk to my care. (57)  
5 4 3 2 1
53. Questioned me about my health history. (58)  
5 4 3 2 1



Key: 5 = Always  
4 = Frequently  
3 = Occasionally  
2 = Rarely  
1 = Never

As a patient in labor and delivery, the nurses:

54. Helped me set goals for my labor and delivery which I was able to do. (59)  
5 4 3 2 1
55. Helped me find solutions regarding my problems. (60)  
5 4 3 2 1
56. Dealt with my labor and delivery in ways that were impractical to me. (61)  
5 4 3 2 1
57. Helped me with all of my labor and delivery, not just part of it. (62)  
5 4 3 2 1
58. Helped me deal with difficult situations. (63)  
5 4 3 2 1
59. Helped me understand how I was thinking about my labor and delivery. (64)  
5 4 3 2 1
60. Asked me how I thought my labor and delivery was going. (65)  
5 4 3 2 1
61. Helped me explore alternative ways of dealing with my labor and delivery. (66)  
5 4 3 2 1
62. Asked me what I knew about my labor and delivery. (67)  
5 4 3 2 1
63. Provided me with literature about my labor and delivery. (68)  
5 4 3 2 1
64. Used medical terms that I didn't understand. (69)  
5 4 3 2 1
65. Taught me how to care for myself. (70)  
5 4 3 2 1
66. Helped me to figure out questions to ask my physician. (71)  
5 4 3 2 1
67. Discouraged me from asking questions. (72)  
5 4 3 2 1

Key: 5 = Always  
4 = Frequently  
3 = Occasionally  
2 = Rarely  
1 = Never

As a labor and delivery patient, the nurses:

68. Checked with me to make sure I understood what was happening to me. (73)  
5 4 3 2 1
69. Helped me understand how my labor and delivery may affect my sexuality. (74)  
5 4 3 2 1
70. Made me feel as comfortable as possible. (75)  
5 4 3 2 1
71. Respected my need for privacy. (76)  
5 4 3 2 1
72. Made sure the other nurses knew how to take care of me. (77)  
5 4 3 2 1
73. Knew what to do in an emergency. (78)  
5 4 3 2 1
74. Never asked what I needed. (79)  
5 4 3 2 1
75. Protected me from situations where I could get harmed. (80)  
5 4 3 2 1

Code No. \_\_\_\_\_ (1-4)  
Card No. \_\_\_\_\_ (5)

76. Encouraged me to have personal items brought in from home. (8)  
5 4 3 2 1
77. Knew a lot about my labor and delivery. (7)  
5 4 3 2 1
78. Spent quiet time with me. (8)  
5 4 3 2 1

Key: 5 = Always  
 4 = Frequently  
 3 = Occasionally  
 2 = Rarely  
 1 = Never

As a labor and delivery patient, the nurses:

- |     |   |      |
|-----|---|------|
| 79. | Made me feel safe.  | (9)  |
|     | 5 4 3 2 1   |      |
| 80. | Allowed my family to visit often.                                     | (10) |
|     | 5 4 3 2 1   |      |
| 81. | Limited or interfered with my basic routine practices.                | (11) |
|     | 5 4 3 2 1   |      |
| 82. | Made sure I got the fluids I needed.                                  | (12) |
|     | 5 4 3 2 1   |      |
| 83. | Gave me good physical care.   | (13) |
|     | 5 4 3 2 1   |      |
| 84. | Monitored my activity level.  | (14) |
|     | 5 4 3 2 1   |      |
| 85. | Helped me with my special routine needs for sleep.                    | (15) |
|     | 5 4 3 2 1   |      |
| 86. | Made me wait a long time when I needed help with bathroom activities. | (16) |
|     | 5 4 3 2 1   |      |
| 87. | Helped me with my personal routines for bathing.                      | (17) |
|     | 5 4 3 2 1   |      |
| 88. | Helped me feel less worried.  | (18) |
|     | 5 4 3 2 1   |      |
| 89. | Allowed me to be alone with my spouse and special family and friends. | (19) |
|     | 5 4 3 2 1   |      |
| 90. | Discouraged me from interacting with others.                          | (20) |
|     | 5 4 3 2 1   |      |

Key: 5 = Always  
4 = Frequently  
3 = Occasionally  
2 = Rarely  
1 = Never

As a labor and delivery patient, the nurses:

91. Helped me achieve my labor and delivery goals. (21)  
5 4 3 2 1
92. Didn't care how much I ate or drank. (22)  
5 4 3 2 1
93. Respected my need to sleep. (23)  
5 4 3 2 1
94. Understood my unique situation. (24)  
5 4 3 2 1
95. Had no idea how my labor and delivery was affecting my life. (25)  
5 4 3 2 1
96. Was concerned about how I view things. (26)  
5 4 3 2 1
97. Knew what was important to me. (27)  
5 4 3 2 1
98. Acknowledged my inner feelings. (28)  
5 4 3 2 1
99. Helped me cope with the stress of my labor and delivery. (29)  
5 4 3 2 1
100. Showed respect for those things that have meaning to me. (30)  
5 4 3 2 1

THIS IS THE END OF THE SURVEY. IF YOU WERE ASKED TO ADVISE NURSES ON WHAT THEY NEED TO DO DIFFERENTLY, WHAT WOULD YOU ADVISE? YOU MAY WRITE ON THE BACK OF THIS PAGE. THANK YOU VERY MUCH FOR YOUR PARTICIPATION.

Patient Information Form

Directions: Please fill in the information in the blanks correctly for questions 1-4.

1. Your age: \_\_\_\_\_ years
2. The date you delivered your baby \_\_\_\_\_  
MMDDYY
3. The number of times you have been pregnant \_\_\_\_\_
4. The number of children you delivered that are now living \_\_\_\_\_

Directions: For the following questions, please circle the answer that is most correct:

5. What kind of delivery did you have?
  1. Vaginal delivery, no forceps
  2. Vaginal delivery, and forceps were used
  3. C-section
6. Did you experience any complications during your labor and delivery? If so, please indicate below:
  1. Excessive bleeding
  2. The baby's heart beat dropped too low during labor.
  3. The baby was too big to fit through my pelvis.
  4. High blood pressure or preeclampsia or toxemia
  5. Other \_\_\_\_\_  
(Please specify)
7. What is your current marital status?
  1. Married
  2. Single
  3. Widowed
  4. Divorced
  5. Separated
8. What is your ethnic background?
  1. White (Caucasian)
  2. Black
  3. Asian
  4. Hispanic
  5. Other \_\_\_\_\_  
(please specify)

9. What is your education background?

1. 0-8 grade
2. Some high school
3. Graduated from high school
4. 1-3 years of college
5. College graduate
6. Graduate education
7. Postgraduate education

10. What is your current employment status?

1. Employed full time
2. Employed part time
3. Retired
4. Unemployed

11. What is your annual household income?

1. Less than \$8000
2. \$8000 - \$15,000
3. \$15,001 - \$20,000
4. \$20,001 - \$30,000
5. \$30,001 - \$40,000
6. \$40,001 - \$50,000
7. Greater than \$50,000

12. Which of the following do you perceive to be of support to you?(Circle all that apply)

1. Spouse
2. Children
3. Other family
4. Friends
5. Pets

13. Where did you get most of your information about what to expect in labor and delivery?

1. Prepared childbirth classes
2. Books
3. Labor and delivery nurses
4. Your doctor or midwife
5. Your family
6. Your friends

### Patient Survey

Most women have some expectations of childbirth before their babies are born. Please indicate the degree to which your expectations of childbirth were met by making an X on this line.

-----  
Did not meet my  
expectations at all

Far exceeded my  
expectations

Please comment on anything related to your labor and delivery which you especially liked or disliked.

Part 2  
The Relationship Between  
Patients' Perceptions of Nurse  
Caring Behaviors and Patient  
Satisfaction with Labor and Delivery  
Colleen Gutierrez  
Cindy Sexton  
Georgetown University

Running head: Nurse Caring Behaviors



## Abstract

A descriptive correlational study was done to determine the relationship between patients' perceptions of nurse caring behaviors and patient satisfaction with labor and delivery. Thirty postpartum women who had vaginal deliveries served as subjects during their hospital stays. Patients' perceptions of nurse caring behaviors were measured using a 100-item Caring Assessment Tool and a one-item Patient Survey measured patient satisfaction. Statistical analysis by Spearman rank correlation coefficient revealed a significant positive correlation of  $r_s=0.37$  at a significant alpha level of 0.044. These findings lead to the conclusion that patients' perceptions of nurse caring behaviors are related to satisfaction with the labor and delivery experience. Results serve as evidence of nursing's important influence on patient satisfaction in labor and delivery.

The Relationship Between Patients' Perceptions of  
Nurse Caring Behaviors and Patient Satisfaction  
with Labor and Delivery

Purpose of the Study

The purpose of this study is to describe the relationship between patients' perceptions of nurse caring behaviors and patient satisfaction during labor and delivery.

Research Question

What is the relationship between patients' perceptions of nurse caring behaviors and patient satisfaction during labor and delivery?

Procedure

A descriptive correlation study was conducted using 30 subjects from Georgetown University Hospital. The convenience sample consisted of women on the postpartum unit who experienced a vaginal delivery of a liveborn baby between 7 February 1991 and 16 April 1991. Women who had Cesarean sections were excluded from the study.

Patients who met the inclusion criteria were identified by the Perinatal Unit Research and Protocol Nurse. The study was explained to the

subjects who gave informed consent prior to participation. The subjects were then asked to complete three questionnaires: 1) the Patient Information Form, 2) the 100-item Caring Assessment Tool, and 3) a one-item Patient Satisfaction Survey (a Visual Analog Scale) consisting of a 88 millimeter line on which the patient was to make a mark to indicate to what degree the labor and delivery experience met their expectations. Subjects spent approximately 30 minutes completing the tools which were then collected by the investigators.

### Findings

#### Demographic Data

The average participant in this study was 30 years old (range=21-41), married (90%), Caucasian (60%), a college graduate (67%), working full-time (57%), and had an annual household income of greater than \$50,000. 53% were multiparous and 47% were primiparous. 70% had a normal spontaneous vaginal delivery, while the remaining 30% had vaginal deliveries assisted by vacuum extraction or forceps.

#### Responses on Care Assessment Tool

Scores on the Care Assessment Tool ranged from

358 to 500 (possible range 100-500). The median score was 452. Scores were very high although 1% of the questions on the CAT were not answered. Question 23 "Restricted my need for spiritual support" was the question most often left unanswered. Those questions for which the nurses were rated highest included #3 "Respected me", #5 "Treated me kindly", #7 "Answered my questions", #16 "Helped me to believe in myself", and #40 "Paid attention to me when I was talking".

#### Responses on the Patient Satisfaction Tool

The scores on the visual analog scale ranged from 41mm to 88mm (possible range 0-88mm). The mean score was 63.4 with a median of 66mm. A significant finding was that 10% of the subjects did not mark the visual analog scale.

#### Statistical Analysis

A Spearman rank correlation coefficient revealed a significant positive correlation between the scores on the Care Assessment Tool and the Patient Satisfaction Scale. The  $r_s = .3709$ , with a significant alpha of .044.

#### Discussion

These results support the original hypothesis

that there is a positive relationship between patients' perceptions of nurse caring behaviors and patient satisfaction with the labor and delivery experience. While the majority of existing childbirth satisfaction research has focused on describing the concept and critiquing methodology for its study, this study focused on nursing's influence on childbirth satisfaction. Although previous studies did not focus on nursing, many of them identified nursing care as having the most significant impact on childbirth satisfaction. This study serves as a starting point for investigating nursing's important contribution to this area.

Findings from this study also support the use of Watson's Theory of Human Care for future nursing research. Duffy's Caring Assessment Tool (CAT) was developed from Watson's Carative Factors. Use of the CAT in this study demonstrates its usefulness in the previously untested area of labor and delivery. This strengthens the generalizability of the CAT.

Some limitations were apparent in the CAT, as well as the Patient Satisfaction Survey and the Patient Information Form. One percent of the CAT

questions were left blank or marked "N/A". These questions were most often related to sleep or spirituality. In revision of the CAT for future use in labor and delivery, these questions need to be changed or deleted. A separate "N/A" response should be included, so that responses of this type do not falsely influence results.

The Patient Satisfaction Survey must be reconstructed in order to decrease the number of items left blank. It appeared to be difficult for some subjects to rate satisfaction on a visual analog scale. Perhaps, in future studies the visual analog scale needs to be replaced with a numbered scale. If the visual analog scale is used again it might also be helpful to change the indicator at the far right of the scale to "Exceeded my expectations", or "Met my expectations", instead of "Far exceeded my expectations".

One item dealing with complications of labor and delivery was particularly problematic on the Patient Information Form. This question needs a response of "None" when it is used in the future.

Other limitations were related to sample and

time. The sample size of 30 is small. The convenience method of sampling generated a skewed, older, well-educated sample from a higher socioeconomic status that is probably not representative of the normal labor and delivery population.

Finally, statistical analysis of the data will not be complete without a description of inter-item reliability for the CAT. After thorough exploration of various resources the investigators were unable to do a Cronbach's Alpha in the time available. Further work on the study will include this statistical test.

Most of the findings were expected. Patients seemed to think highly of the nurses who care for them during labor and delivery. It is valuable to be able to demonstrate this observation with research evidence. It was surprising that so many subjects did not complete the Patient Satisfaction Survey. It is critical to create a valid and reliable tool for measuring this variable. It was somewhat surprising what a large number of responses were marked "Always" or "Never". Subjects tended to respond with the extreme indicator. It would be interesting to

further investigate this phenomenon.

### Implications

#### Nursing Practice

Results of this study serve as evidence of nursing's important influence on patient satisfaction. This research supports the use of Watson's Theory of Human Care in nursing practice and education. Nursing practice can be improved by showing nurses what behaviors patients perceive as caring, then by encouraging nurses to increase those behaviors. Documentation of a correlation between nursing and patient satisfaction may influence hospital administration to invest more funds in nursing in order to reap the benefits of increased patient satisfaction.

#### Future Nursing Research

Recommendations for future research include the following:

1. Replication studies are needed with a larger, more diverse obstetrical sample. In addition, similar studies using the CAT need to be done within other patient specific populations.



2. Although a positive relationship between nurse caring behaviors and patient satisfaction was identified, further research is warranted to delineate which behaviors were more important to this population in increasing patient satisfaction.
3. The CAT needs to be refined for future use in replication studies, eliminating or changing some of the questions which were left unanswered or marked "N/A".
4. Studies are needed to evaluate the Patient Satisfaction visual analog scale as a valid and reliable measure of this variable.

*This form is for use when the research will involve non-therapeutic procedures.*

**GEORGETOWN UNIVERSITY  
Consent to Participate in Research**

1. Project Name: The Relationship Between Patients' Perceptions of Nurse Caring Behaviors and Patient Satisfaction with Labor and Delivery.
2. Project Director: Colleen Gutierrez Telephone: (703) 765-9547  
Cindy Sexton (703) 437-7828  
This research was approved by the Georgetown University Institutional Review Board. For information on research subjects' rights, contact the office of the Institutional Review Board at 687-1506.
3. The purpose of this research is: to describe how women who have delivered a baby at Georgetown University Hospital perceive nurse caring behaviors and how satisfied they are with the experience.
4. The general plan of the research is: that thirty women who have delivered a baby at Georgetown University Hospital and who have agreed to participate will be asked to complete three paper and pencil tests. It will take approximately 20 to 25 minutes to complete the tests, which will be collected by an investigator upon completion.
5. The following procedures will be performed on those who participate in this research: No procedures will be performed on those who participate.
6. Those who participate in this research will be asked to do the following things: Women who agree to participate will complete three paper and pencil tests including the Caring Tool (100 items), the Patient Satisfaction Tool (1 item), and the Patient Information Survey (13 items).

7. This research may result in the following discomforts: None

8. Participation in this research may involve the following risks: None

9. The investigators will do everything possible to prevent or reduce discomfort and risk, but it is not possible to predict everything that might occur. If a participant has unexpected discomfort or thinks something unusual or unexpected is occurring he/she should contact: Colleen Gutierrez (703) 765-9547 or Cindy Sexton (703) 437-7828

While every effort will be made to maintain the confidentiality of these study records, on occasion the Food and Drug Administration (FDA) may wish to review these records and they will be made available to the drug company sponsor.

In the event of any injury resulting from any research procedure, acute medical care will be provided at the usual charge, but no Federal, District of Columbia Government or Georgetown University funds will be available for compensation. Additional information on this subject may be obtained from the Office of the Medical Director, Georgetown University Hospital at 784-3011.

Anyone who agrees to participate in this research may change his/her mind at any time. Refusal to participate or to continue to participate will not harm an individual's relationship with the investigators, his/her physicians, the hospital or the University.

I have read the above description of a research project (or: it was read to me by: \_\_\_\_\_).  
Anything I did not understand was explained to me by: \_\_\_\_\_ and I had all of my questions  
answered to my satisfaction. I agree to participate in this research.

I acknowledge I have received a personal copy of this signed consent form.

(signed) _____	_____
(Participant or Legal Representative)	Date
(signed) _____	_____
(Assent of child if under 18 years of age)	Date
(signed) _____	_____
(Witness)	Date
(signed) _____	_____
(Investigator)	Date